DOCUMENT RESUME

ED 119 382 EA 008 036

AUTHOR Gould, Elaine S.; And Others
TITLE Selected and Annotated Bibliography on Financing Education.
INSTITUTION Agency for International Development (Dept. of State), Washington, D.C.
PUB DATE Jun 73
NOTE 49p.

EDRS PRICE MF-$0.83 HC-$2.06 Plus Postage
DESCRIPTORS *Annotated Bibliographies; Developed Nations; Developing Nations; *Educational Finance; Educational History; Educational Policy; Elementary Secondary Education; *Financial Policy; Higher Education; *National Programs; *Program Descriptions; Publications; Reference Materials; Resource Allocations

ABSTRACT

This annotated bibliography lists approximately 200 selected publications dealing with the acquisition and distribution of educational funds. Writings concerned with the broader problems of educational economics were considered beyond the scope of this bibliography and are not included. With the exception of literature dealing with the history of educational finance, no publications written before 1960 are included. The booklet is organized in five parts that list publications dealing with educational finance from a historical perspective, educational finance in the United States, educational finance in other countries, educational finance in developing countries, and bibliographies relevant to educational finance. Within each topical section, entries are listed alphabetically by author's name. (Author/JG)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED119382

Selected and Annotated Bibliography on Financing Education

ELAINE S. GOULD
ADELE NEURINGER
MANUEL ZYMELMAN

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL HAS BEEN GRANTED BY

AID

TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE NATIONAL INSTITUTE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER.

This book was produced as part of a project sponsored and funded under a contract with the Agency for International Development. The views expressed herein are, however, those of the authors and are not necessarily those of the Agency.

All rights reserved.

EA 008 036

INTRODUCTION

In the course of developing a project on educational finance for the Agency for International Development a vast amount of materials, dealing directly or indirectly with the financing of education, was thoroughly reviewed. This bibliography is the direct outcome of this literature review. It is intended for the student of educational finance.

The selection of studies to be included in this bibliography was based on various criteria. Only studies dealing with the acquisition and distribution of funds in education were included. Thus, writings dealing with the broader problems of the economics of education were considered beyond the scope of this work. Because of the repetitive nature of some studies only representative ones were selected. Finally, with the exception of literature dealing with the history of educational finance, only material written after 1960 was included.

This bibliography is divided into five parts: Educational Finance from an Historical Perspective; Educational Finance in the United States; Educational Finance in Other Countries; Educational Finance—Developing Country Studies; and Bibliographies dealing directly or indirectly with Educational Finance.

Annotations were written for information about content only; they were not intended for review purposes.

To those authors whose works were not included because of lack of time and space, our sincerest apologies.

MANUEL ZYMELMAN
Project Director

Cambridge, June 1973

EDUCATIONAL FINANCE—HISTORICAL PERSPECTIVE

Sources Explicitly on Educational Finance in History

Beshir, Mohammed Omer. *Educational Development in the Sudan 1898-1956*. Oxford: Clarendon Press, 1969.

This is a thorough and valuable explanation of an early and traditional Moslem society upon which both a neglectful and a committed foreign power occupation is imposed. The function of the schools and their means of support by religious groups and state or local authorities during the early Moslem, Turco-Egyptian and Condominium periods are discussed.

Black, Marian Watkins. "Private Aid to Public Schools—Peabody Fund in Florida 1867-1880." *History of Education Quarterly*, September, 1961, 38-42.

This is a description of the operation of an early instance of "matching grants." The Fund matched amounts raised by local people to support free common schools.

Cameron, John and Dodd, W.A. *Schools, Society and Progress in Tanzania*. Oxford: Pergamon Press, 1970.

The history of Tanzania through the successive influences of Bantu, Arab, Omantraders, Asians, missionaries, Germans, and the British is related. The positive accomplishments of African initiative and responsibility in Native Authority Schools and British Colonial Development and Welfare Act subsidies are described.

Chellian, D.D. *A Short History of the Educational Policy of the Straits Settlement*. Kuala Lampur: Government Press, 1947.

Much of Malay's educational problems was the extreme diversification of cultures, religion and language. This book describes the evolution of vernacular schools and the use of grants by results, classification, subjects, estimates, attendance, and discipline. Covers many possibilities of grants.

Corlett, J. *A Survey of the Financial Aspects of Elementary Education*. London: P.S. King and Son, Ltd., 1929.

A comparative study of English education grants—matching, capitation, fee, block, fixed, annual, small population, special subjects, special schools, necessitous areas—and the legislation which provided many of them.

Dixon, Willis. *Education in Denmark*. London: George C. Harrap and Company, 1958.

The history of education in Denmark from the 12th and 13th century to the present is one familiar to western Europe, i.e., the evolution of a system of parish and diocesan schools into a state-supported system.

The roles and responsibilities of central and local governments in private and state schools are discussed. It is a grant-aided system with attention to equalizing resources.

Foster, Philip. *Education and Social Change in Ghana*. Chicago: University of Chicago Press, 1965.

This is an analysis of the development of Ghanian education from the period of the early Portuguese, Dutch, and Danish trading companies throughout British colonial rule to the present state of independence. Emphasis is given to methods of financing trader, missionary, native, and crown schools and the relevance of the educational content to Ghanian social and economic realities.

Hall, Robert K. and Lauwery, J.A. (eds.). *The Yearbook of Education—1956: Education and Economics*. London: Evans Brothers, Ltd., 1956.

This is an extensive compilation—the theme of which is the provision of education, particularly the economic aspects. Subjects pertinent to the history of educational finance include Renaissance universities, charity schools, Jesuits, land grants, foundations, subsidies to Norwegian students, property tax, apprenticeship tax in France, and many more.

Lewis, L.J. *Society, Schools and Progress in Nigeria*. Oxford: Pergamon Press, 1965.

This is one of the more informative books in a continuing series in comparative education. The development of modern education is traced through trading interests and missionary activities to British indirect rule and independence. An analysis is made of the colonial point of view that expenditure on education is limited to that afforded out of current revenues and the newer idea that education is an investment. Methods of finance are given.

Misra, Atmanand. *Educational Finance in India*. New York: Asia Publishing House, 1962.

This is a comprehensive study of the history of educational finance in India from the charter of the British East India Company until independence. Sources of funds; laws and administration of finances throughout the period are listed. Assessment is made of the various distribution schemes and especially noted is the failure of support to primary education while favoring higher education.

Muscalus, John Anthony. *The Use of Banking Enterprises in the Financing of Public Education (1796-1866)*. Philadelphia: University of Pennsylvania, 1945.

This book traces the investment of money earmarked for school funds from land sales, fees, licenses, auctions, lotteries, fines, escheats, etc., by some states in banks. States derived income from banks by bonuses, taxes, and other most profitable ways.

Noah, Harold J. *Financing Soviet Schools*. New York: Teachers College Press, 1966.

This book is a description of educational finance in the USSR. Sources of funds, budgeting procedures of levels of government, specific taxes, and government aid to students at higher levels and of unusual talents are reviewed.

Phillips, Charles E. *The Development of Education in Canada*. Toronto: W.J. Gage and Company, Ltd., 1957.

This is an authoritative work on the history of education in the separate provinces of Canada from Old England and France to modern times. Included with factual descriptions of types of schools, legislation and sources of funds, are evaluations of methods of finance such as rate bills, teacher boarding, land grants, payment by results, and matching grants. One focus of the book is the question of philanthropy and paternalistic grants fostering a lack of local initiative and responsibility.

Rubeni, T. Ranjit. *Education in Colonial Ceylon (1796-1834)*. Kandy: Kandy Printers, Ltd., 1962.

This is a precise account of how the Buddhist education system was supported in Ceylon and how it was supplanted by Portuguese, Dutch and British Trading Companies, and missionaries. Specific attention is given to methods of financing the various types of schools.

Sack, Saul. "A 19th Century Scheme for Financing Higher Education in Pennsylvania." *History of Education Quarterly*, September, 1961, 50-54.

A group of Pennsylvania denominational colleges (Swarthmore, Wilson, Franklin and Marshall, Bucknell) tried to secure prepaid tuition by selling temporary and permanent scholarships at varying prices in advance. The assumption was that the interest collected on the sums acquired would realize an income adequate to meet operating needs.

Schafer, Joseph. *Origin of System of Land Grants for Education*. Madison, Wisconsin: Bulletin of University of Wisconsin, August, 1902.

Historical antecedents to modern land grants are traced to 16th century England and 17th century America. Confiscations of the monasteries by Henry VIII led to a decline in the number of schools. Petitions for their re-establishment were answered by grants of sequestered church lands to towns. The wealthy also bequeathed estates. In America, towns granted wild lands for schools.

Smith, W.G. "Government Finance for Private Schools in Australia." *School and Society*, October 3, 1964, 268-269.

Federal government will pay interest on state education loans for 20 years up to 5¼ per cent. In Queensland, scholarships are given to schools, not parents or students. In Tasmania direct grants are given to children in highest class of public and private high schools whose parents' income falls below given sum.

Swift, Fletcher Harper. *A History of Public Permanent Common School Funds in the United States 1795-1905.* New York: Henry Holt and Company, 1911.

This is a state by state analysis of sources, management, increases, losses and present (1905) conditions of the permanent common school funds in the U.S. Public permanent common school funds were the first stable source of support given to state systems of free schools in America; it set the systems in motion. The ingenuity of finding sources for these funds is as unbelievable as is the ease of dissipation. Local taxation for schools in the later 19th century minimized the importance of the school fund. The author fills every page with useful financial revelations.

Swift, Fletcher Harper. *European Policies of Financing Educational Institutions—Practices of France, Czechoslovakia, Austria, Germany and England.* Berkeley: University Press, 1933-1939.

This is an excellent comprehensive analysis of the revenue and expenditures in five countries of Europe. Specific financial responsibilities of central, departmental, and municipal governments are noted with respect to different levels of education. An attempt is made to analyze the evolution of each system in terms of national, social, political, and economic factors. France, Prussia-Germany, and England-Wales in particular are thoroughly investigated.

Upraity, Trailokya Nath. *Financing Elementary Education in Nepal.* Eugene, Oregon: American Nepal Educational Foundation, 1962.

In Nepalese educational history, Buddhist and Brahmin influences intermingled giving education more of a secular nature while training for caste-decreed occupations. Kings supported temples and monasteries where learning took place. There is some evidence of voluntary taxation. Royalty suppressed mass education until modern times. The remainder of this book describes financing in recent years, foreign aid, possibilities of land cess, etc. and projected needs.

Walker, W.G. "Development of the Free Public High School in Illinois During the 19th Century." *History of Education Quarterly,* 1963-64, 264-279.

Church secondary schools provided most of the higher education in Illinois until the passage of the Free School Law of 1855 wherein a uniform *ad valorem* tax of 2 mills on the dollar of property value permitted the establishment of free schools. Land grants and township funds also contributed to the support and by 1862 every major town had a free high school.

Sources on History of Education in Particular Countries with Incidental Information on Finance

Adams, Howard. *The Education of Canadians 1800-1867.* Montreal: Harvest House, 1968.

The thesis of this author is that the educational needs of Canadian farmers, laborers, and immigrants in the early 19th century were ignored. The oligarchic control of Upper Canada by the Family Compact, the misuse of the Clergy Reserves and confiscated Jesuit estates, and the conservative French Catholic clergy prevented the development of a free common school system.

Carter, Jefferson. "Worker Education in England and France 1800-1914." *Comparative Studies in Society and History*, 345-366.

Adult education in England was sponsored by voluntary groups such as the Anglican Church, Quakers, Owenites, and Christian Socialists. In France the government contributed to adult education groups. Both movements declined after the initial absorption of effects of the Industrial Revolution.

Figueroa, John J. *Society, Schools and Progress in the West Indies*. Oxford: Pergamon Press, 1971.

The history of education in the West Indies is one of slavery, buccaneers, uncommitted colonists, and a lost world sugar market. Most upper class children were sent abroad. However, the British government in 1835-40 did grant 30,000 pounds per year for the education of ex-slaves. In general, education was neglected.

Frost, S.E. "Higher Education Among the American Indians During the Colonial Period." *History of Education Journal*, Spring, 1958, 59-66.

This article describes the attempts to educate American Indians at William and Mary College and Harvard College with the intent of using the educated Indian as a religious middle-man. Their education was to be financed by the estate revenues of a Mr. Boyle; subscriptions to the Corporation for the Propagation of the Gospel; or rate charges in perpetual obligation upon willing colonists.

Gill, Clark C. *Education in a Changing Mexico*. Washington, D.C.: U.S. Government Printing Office, 1969.

The author describes Mexican schools of the pre-Conquest period: State schools for the priestly education of the nobility and warrior education of the middle classes. These were supported by the labor of students, parents or relatives. The colonial mission activity and the Constitution of 1917 are discussed and extra-school educational agencies are listed; secularization is emphasized.

Grant, Nigel. *Society, Schools and Progress in Eastern Europe*. Oxford: Pergamon Press, 1969.

Education in Eastern Europe is state provided and state controlled. Pre-school education is widespread with normally low fees and may be provided in factories, farms, or office buildings. There is a charge for books in some of the countries described: Poland, Hungary, Rumania, Yugoslavia, Bulgaria, and Albania.

Hopkins, Eric. "A Charity School in the 19th Century: Old Swinford Hospital School 1815-94." *British Journal of Educational Studies*, June, 1968, 177.

The evolution of this charity school from a school for apprenticeship to a vocational secondary school is described. Founded with endowments of land, education was free to poor, Anglican sons of honest parents. At age 14 each youth was apprenticed. Eventually grants were given to the boys or tuition paid at universities.

Japan, Ministry of Education. *History of Japanese Education*. Tokyo: Department of Education, 1910.

This little treatise on Japanese educational history is delicately written and includes information on provision of education and financing of same from the introduction of Chinese learning in the 3rd Century A.D. to the early 1900's. Early forms of taxation for community agricultural education included wild animal skins and silk. The decline of intellectual interests under the samurai in the Middle Ages and educational revival is reported.

Katz, Joseph. *Schools, Society and Progress in Canada*. Oxford: Pergamon Press, 1969.

The organization and administration of educational enterprise falls to provincial legislatures with the federal government playing a minimal role throughout Canada's history. Private schools may not be subsidized from public funds. Jesuit, charity, monotorial, Sunday, and infant schools were part of Canada's past.

Kazamias, Andreas. *Education and the Quest for Modernity in Turkey*. Chicago: University of Chicago Press, 1966.

The Ottoman Empire of the 15th century encouraged merit and social mobility by its palace school for choice youth. Co-existing with the state school was a system of religious schools—mektabs and medresses attached to mosques charging no tuition and providing free food and allowances for advanced students. Kazamias traces the development of dual educational systems with emphasis on the recognition of the role of the state in providing free, secular education.

LeGuin, Charles A. "The Continuing Education of Jean-Marie Roland (1734-1793)." *History of Education Quarterly*, 1963-64, 127-133.

The theory in France of the enlightenment was that adult education should be encouraged and patronized by the crown. Private literary study groups were extended to the provinces and the state supported the establishment of veterinary schools, museums and libraries in addition to awarding prizes for research and essays.

Magnuson, Roger. *Education in the Province of Quebec*. Washington, D.C.: U.S. Government Printing Office, 1969.

The history of education in the province of Quebec is traced. Public education is denominational with local school boards levying property

taxes and aided by provincial grants. Catholic and Protestant boards exist with corporate and non-private real estate taxes distributed proportionately. Scholarships and loans are available for vocational, adult, and pre-primary education and for research administered through local boards.

McWilliam, H.D.A. *The Development of Education in Ghana.* London: William Clowes and Sons, 1959.

Progress in education in Ghana is a function of world economy. Finances are secured from duties levied on Ghana's exports and imports. Mission history and British Ordinances for education are recounted with a nice critique for payment by results. The origin of the 1929 Colonial Development Welfare Act as an anti-unemployment and anti-depression measure is noted.

Morrell, Muriel. *African Education—Some Origins and Development Until 1953.* Johannesburg: South African Institute of Race Relations, 1963.

Education for Africans in the different states of the Union of South Africa is the subject of this book. The author tells of missionary schools and their attempts to teach industrial arts aided by government grants to stations where master craftsmen taught. Africans were encouraged to raise funds for school buildings to be "matched" by government grants for equipment and salaries. Development of native schools in different states is mentioned and the results of the Native Taxation and Development Act of 1925 are given.

Partridge, P.H. *Society, Schools and Progress in Australia.* Oxford: Pergamon Press, 1968.

In the six colonies of early Australia, educational responsibility rested with the Anglican, Presbyterian, and Catholic Churches with small government grants to assist in payment of salaries and building of schools. Increased government participation in the 1820's by grant of 1/7 of crown lands in each country for clergy and school support, and government subsidization of denominational schools by matching sums voluntarily raised strengthened church schools. This system became the state system in the late 1880's.

Passin, Herbert. *Society and Education in Japan.* New York: Teachers College Press, 1965.

A short review of the development of a national system of education during the Tokagawa period. Parish (terakoya) secular schools and higher level goguku schools were free, supported by wealthy individuals, domainal contributions, donations in kind (dried sardines, lengths of cloth) and personal service. School land was exempt from taxation. Class distinctions existed.

Pritchard, David. "The Development of Schools for Handicapped Children in England During the 19th Century." *History of Education Quarterly,* 1963-64, 215-229.

Early schools in late 18th century England for deaf, blind, and otherwise handicapped children were commercial enterprises with parental fees charged. Later, the state took over the expense of educating these children in schools conducted by voluntary bodies.

Roucek, Joseph. "Education Within the Czarist Framework." *Pedigogic a Historica*, 1964, 392-443.

Education for the upper classes in Czarist Russia was by tutors and private schools. Foreign revolutions impeded progress in providing education to the people; indeed, retrogression was more likely. In between reactions, Lomonosov in 1775 founded Russia's first University of Moscow—secular, modern, and scientific. The State provided buildings, and maintenance grants. Catholics tried to organize state-supported system. Alexander granted subsidies to parochial schools.

Samuels, Michael Anthony. *Education in Angola 1878-1914*. New York: Teachers College Press, 1970.

Angola is unique in African colonial history in that Portugal lacked *both* a philanthropic tradition as well as government support of the church at home. Therefore, there was little support of mission activities. The home tradition in education was one of government neglect. Although 1772 law called for public state-provided schools in each local center, it was poorly implemented. In Angola, schools were few and established only as adjuncts to administration stations.

Sargent, Sir John. *Society, Schools and Progress in India*. Oxford: Pergamon Press, 1968.

Somewhat superficial treatment of the history of education in India. First attempts at rural and urban local taxation for education are mentioned as well as grant-in-aids at higher levels.

Scanlon, David. *Education in Uganda*. Washington, D.C.: U.S. Department of Health, Education, and Welfare, 1964.

Missionary boarding schools were one of the earlier formal forms of education. These were supported by donations from abroad, local parental resources (house building), and garden plots. Central government granted subsidies to voluntary agencies since 1913. Resources for education today are described.

Trial, George T. and Winder, R. Bayly. "Modern Education in Saudi Arabia." *History of Education Quarterly*, Spring, 1950, 121-133.

In Saudi Arabia, because of the extreme religious preferences of the rulers, people never received the "benefits" of missionary education. Elementary schools are adjuncts of mosques where a high percentage of the learning is Arabic language and religion. The wealthy have tutors and some education is provided by military missions, the Aramco vocational schools, and on-the-job training at oil companies and business offices.

Broad Surveys on the History of Education—Financial Aspects Included

Atkinson, Carroll and Maleska, Eugene. *The Story of Education*. Philadelphia: Chilton Company, 1962.

This is a survey which examines how diverse philosophies of life in societies throughout history effect the learning and training and give uniqueness to the educational system of that society. Primitive, Oriental, Hebrew, Greek, Roman, Christian, Medieval, Monastic, Chivalric, guild, humanistic, realistic, rationalistic, naturalistic, and nationalistic, ideas are observed. The type of schools they inspire and the sources of support are given.

Dolson, J.F. *Ancient Education and Its Meaning to Us*. New York: Longmans, Green, and Company, 1932.

The author analyzes the classic contrast of Athens and Sparta. Early financial records and Roman imperial tax exemptions and endowments are mentioned.

Marrou, H.I. *A History of Education in Antiquity*. New York: Sheed and Ward, Inc., 1956.

This is a scholarly survey of Greek, Roman, and early church education. A description of the nature of the schools is provided. Greek schooling was available to the aristocracy and primarily financed by private tuition payments often made by contract in advance for a complete course of study, payment by seat at lectures, gifts, endowments of gymnasiums, princely foundations whose income was donated to cities and royal patronage. Roman and church schools are likewise described.

Reynolds, Robert. "Two Documents Concerning Elementary Education in the 14th Century." *Speculum*, 1937, 255-256.

Two documents are presented in this article. One tells of the existence of urban day and board schools to prepare boys for the university, along with monastic schools. The other is a contract between a schoolteacher and a banker to teach two boys reading. Terms of the contract are stipulated.

Smith, William. *Ancient Education*. New York: Philosophical Library, 1955.

The formal and informal education of the ancient societies of Sumeria, Mesopotamia, Egypt, India, China, Greece, Rome, and Israel is described. Formal learning is primarily associated with religious observances by priests at temples. An economic surplus is also a common factor in the development of formal education by releasing some of the population to administer records, master accounting techniques, and learn weights and measures.

Thorndike, Lynn. "Elementary and Secondary Education in the Middle Ages." *Speculum*, October, 1940, 400-408.

This article traces the proliferation of schools in Western Europe from

the parish schools of the early Middle Ages to the rise of municipal schools under town control in the later Middle Ages and the consequent decline of both in the 14th and 15th century. Charges are listed and sources of support given.

Wise, John. *History of Education*. New York: Sheed and Ward, 1964.

A survey of the history of education with particular emphasis on the relationship of educational provision to social, economic, and religious ideas and events as they occurred throughout history. The societies of ancient Greece, Rome, and Israel are discussed followed by church history, feudalism, the Renaissance, the Reformation, and the Industrial Revolution. Concludes with a brief survey of world countries and a comparative study of the 20th century.

Woody, Thomas. *Life and Education in Early Societies*. New York: Macmillan and Company, 1949.

A classic reference in educational history. Financial aspects are minimal. However, of interest are: primitive society fees to wise tutors before training in exorcising evil spirits; teaching and apprenticeship contracts of Egyptian and Babylonian times; Hebrew formal school education and colleges for scribes; Chinese taxes in kind on farmers to support schools; and Athenian and Roman school origins and low tuition fees.

EDUCATIONAL FINANCE—UNITED STATES

Alan, Thomas J. *School Finance and Educational Opportunity in Michigan*. Michigan School Finance Study. Lansing, Michigan: Michigan Department of Education, 1968.

This is a comprehensive study of Michigan elementary and secondary schools, both public and private, focusing on the relationship of finance to educational opportunity.

Allen, James E. *Educational Priorities and the Handicap of Local Financing*. New York: Columbia University, Teachers College, 1968. (ERIC Document No. ED030694.)

This study discusses James Conant's proposal for state financing to replace locally levied taxes as the system for financing public schools in New York. In supporting this proposal, he discusses how it would benefit both the financing and quality of education.

Bane, Mary Jo. "Essay Reviews" (Vouchers). *Harvard Educational Review*, February, 1971, 79-87.

This is a review of three books concerning education vouchers: *Education Vouchers* by the Center for the Study of Public Policy, Harvard University; *Private Wealth and Public Education* by John Coons, William Clune, III, and Stephen Sugarman; and *An Essay on Alternatives in Education* by Everett Reimer. The essential arguments of each book are woven into a well developed and cohesive essay about all aspects

of educational vouchers. Two of the larger sections of the article concern vouchers and equality, and vouchers as alternatives for school financing.

Benson, Charles. *The Economics of Public Education*. Boston: Houghton Mifflin Company, 1968.

This text provides a broad background for those readers concerned with the economics of public education. It discusses the economic setting with its social benefits of education. The bulk of the book concentrates on sources of revenue for education and problems in allocating funds in the United States.

Benson, Charles S. "A Possible Breakthrough in the Financing of Public Education." Paper presented at the Symposium on Operations Analysis of Education, Washington, D.C. 1967. (ERIC Document No. ED019741.)

In this paper, Benson proposes a new concept in educational finance. He says schools should be viewed as "differentiated output-accountability systems." This accountability system has three main components. First, the state government should set standards of student achievement and base costs and financing of programs on whether students would meet or surpass these standards. Second, state governments should establish "educational improvement funds" to encourage improved school performance. Third, local initiative should be encouraged. In addition, Benson offers four steps for contractual arrangements between states and the private sector, local districts, and/or universities.

Benson, Charles (ed.). *Perspectives on the Economics of Education—Readings in School Finance and Business Management*. Boston: Houghton Mifflin Company, 1963.

This anthology covers a broad range of topics concerning the economics of education. It is divided into five parts: the returns to education; the economic structure of education; taxes for schools; grants-in-aid; and the problem of productivity in education.

Berke, Joel S. *et al. Federal Aid to Public Education: Who Benefits?* Syracuse, New York: Syracuse University Press, 1971.

The research reported in this book tested the question: to what extent does federal aid to primary and secondary education offset inequalities among selected school districts in the United States? It concludes that federal aid on the average does little to eliminate inequalities.

Brighton, Stayner. *Financing Public Schools—A Study Guide*. Washington, D.C.: National Education Association, 1965.

This is a guide for student teachers, experienced teachers, school administrators, and interested citizens. It describes how public elementary and secondary schools obtain and use their revenue. Some topics included are: a view of school financial problems, a comparison of two hypothetical school district programs, a history of public school fi-

nance, some questions about the rationale for public support for education, school budgets and characteristics of a good school finance program.

Burkhead, Jesse. *Public School Finance—Economics and Politics.* Syracuse, New York: Syracuse University Press, 1964.

This book is a basic text for American educational planners concerned with finance. It deals with all areas pertinent to educational finance such as administration, costs, sources of revenue (taxes and government support) as well as intergovernmental problems of public school finance and basic issues of educational finance.

Burns, M.M. and Chiswick, B.R. "An Economic Analysis of State Support for University Education." *Western Economic Journal,* March, 1969, 84-95.

This article analyzes the rationale for state support of higher education in light of the concern about increasing tuitions. It examines factors that tend to produce a misallocation of resources in higher education as well as the ways these misallocations can be mitigated.

Carpenter, Polly and Hall, George. *Case Studies in Educational Performance Contracting—Conclusions and Implications.* (R-900/1 HEW) Santa Monica, California: Rand Corporation, 1971.

This publication briefly describes the Rand Corporation field study of five performance contracts in different cities in the United States. It then summarizes the results and presents implications. Some of the implications focus on: instructional processes, cognitive growth, resource requirements, evaluation, program-management, returns to contractors, and the major advantages and disadvantages of performance contracting.

The results of each of the case studies is published separately as follows:

R-900/2 HEW Norfolk, Virginia by Polly Carpenter
R-900/3 HEW Texarkana, Arkansas and Liberty-Eylau, Texas by Polly Carpenter, *et al.*
R-900/4 HEW Gary, Indiana by G.R. Hall and M.L. Rapp
R-900/5 HEW Gilroy, California by M.L. Rapp and G.R. Hall
R-900/6 HEW Grand Rapids, Michigan by G.C. Sumner

Carr, R. and Waywar G. "Education by Chit: An Examination of Voucher Proposals." *Education and Urban Society,* February, 1970, 179-191.

This article provides a concise description of the five major voucher proposals under consideration in the United States and briefly outlines their differences. The article concludes by advocating one of them.

Center for the Study of Public Policy (Harvard University). *Education Vouchers.* Washington, D.C.: Office of Economic Opportunity, 1970.

This publication provides a comprehensive statement about education vouchers. It provides arguments in favor of competition and clearly describes several economic models and how vouchers fit those models.

It advocates one model that would accomplish some redistribution of resources while at the same time providing some freedom of parental choice of a child's school. In addition, the study deals with such issues as matching pupils to schools, aiding private schools, identifying children with special needs and discusses the design and problems of a demonstration project. Appendices include relevant material on a variety of legal questions.

Center for Law and Education. *Student Fees*. Cambridge, Massachusetts: Harvard University, 1972.

This book provides excerpts from various legal documents concerning student fees for education.

Chambers, M.M. *Financing Higher Education*. Washington, D.C.: The Center for Applied Research in Education, Inc., 1963.

The purpose of this book is to disclose some of the basic facts about where colleges and universities get their income, how they spend it, and some of the obvious trends and controversial issues of higher education. The book does this by describing the background of college financial support in the United States; income from both non-tax and tax sources; issues in sources of support; some categories of current expenditure; and some efficiency problems.

Coleman, James S. "Equal Schools or Equal Students." *Public Interest*, Summer, 1966. 70-76.

This article describes the results of a survey administered in the United States in 1965 by the Educational Testing Service which raised concern about the quality of public education. Although the report of this survey was obviously devoid of policy implications, Coleman suggests what some might be. The basic implication of the survey is that graduates are unequally prepared to face the world because of unequal backgrounds when they started. "Equal schools" do little to close this gap. Coleman proposes some ways to make schools produce equally equipped graduates. The financial implications of these proposals are only touched on in this article.

Coons, John E. *et al*. *Private Wealth and Public Education*. Cambridge, Massachusetts: Harvard University Press, 1970.

This book is concerned with the "value systems, including law, that affect the distribution of educational resources." It provides a thorough analysis of the present inequities in educational spending and then outlines an "apparatus for justice" which includes a system to equalize power and an active role for the judiciary.

Daniere, Andre. *Higher Education and the American Economy*. New York: Random House, 1964.

This book adds to the good early literature on the economics of education. Its purpose is to clarify concepts about how higher education

and economic markets interact. It deals with such topics among others as pricing, productivity, costs, market imperfections, and regulation.

Davis, Thomas A. *Failure of an Educational Contract*. Unpublished doctoral dissertation. Harvard University, School of Education, Cambridge, Massachusetts, 1972.

This report describes a project in a United States school system to establish a Career Opportunities Program by contract and to establish good contractor-school relations in this situation, to use as a model for future education contracts. This report describes the failure of the contract situation and suggests guidelines for school administrators to use when considering educational contracting.

Dresch, S.P. and Goldberg, R.D. "Variable Term Loans for Higher Education —Analytics and Empirics." *Annals of Economic and Social Measurement*, January, 1972, 59-92.

This paper identifies the characteristics central to the variable term loan. It describes the history and rationale for such a loan and develops a model for the loan system. The income restrictions and capital requirements necessary to make such a loan work are also outlined and examined.

Educational Policies Commission. *Federal Financial Relationships to Education*. Washington, D.C.: National Education Association, 1967.

This pamphlet describes the two basic types of aid, categorical and general, and offers some recommendations for federal, state, and local government financial responsibilities for education.

Firman, William D. *et al.* (eds.). *The Challenge of Change in School Finance*. Proceedings of the National Conference on School Finance (10th, St. Louis, Missouri, April 1967), Washington, D.C. National Education Association, 1967.

This publication contains the papers presented at the National Conference on School Finance. The theme of the conference concerned needed changes in school finance to support the improvements and innovations demanded in American education.

Fowlkes, John and Watson, George E. *School Finance and Local Planning*. Chicago: University of Chicago, Midwest Administration Center, 1957.

This bulletin summarizes the results of a two-year study of school finance and local educational planning in eleven states in the U.S. The purposes of the study were to investigate the relationship between state financial support of public education and the number of controls exercised by the state over local educational programs; to examine the planning processes and local educational planning; and to determine the relationship between the factors influencing the amount of state financial support and selected aspects of local planning.

Freeman, Roger A. *Crisis in College Finance? Time for New Solutions.* Washington, D.C.: The Institute for Social Science Research, 1965.

This book about financing higher education was a response to concern about the increased demand for college education in the United States due to the "postwar baby boom." The book describes the financing problems the boom will bring to higher education and describes possible sources of funds. The data, however, are dated.

Friedman, Milton. *Capitalism and Freedom.* Chicago: University of Chicago Press, 1969.

This book provides a philosophical framework for analyzing the relationship between economic freedom and political freedom and for determining the role of government in a free society. One chapter is devoted to the role of government in education. Friedman sets down the rationale used by many who advocate education vouchers.

Gauerke, Warren E. and Childress, Jack R. *The Theory and Practice of School Finance.* Chicago: Rand McNally and Company, 1967.

This collection of essays covers the wide range of topics concerning the financial aspects of educational administration. It includes papers on taxation, allocation of resources, government structures, fiscal management, budgeting, measuring educational productivity, and personnel policies.

Guthrie, James W. and Lawton, Stephen. "The Distribution of Federal School Aid Funds: Who Wins? Who Loses?" *Educational Administration Quarterly,* Winter, 1970, 47-61.

This article concerns the effects of the distribution pattern for federal aid-to-education funds. It focuses on the equalizing effects of federal funds between states and provides some information on intrastate equalizing patterns. The purpose of this article is to warn legislators and educators to assess financial consequences before deciding on a particular distribution pattern such as block grants.

Hansen, W. Lee and Weisbrod, Burton. *Benefits, Costs, and Finance of Public Higher Education.* Chicago: Markham Publishing Company, 1969.

This is a study of the methodology for estimating the benefits and costs of higher education for a state and the relationship of these benefits and costs to legislative policy. It deals thoroughly with a conceptual framework for making choices in relation to benefits and costs of public higher education in the state of California and their distribution. The epilogue deals with guidelines determining an optimum policy for financing higher education through an understanding of educational costs and benefits.

Harris, Seymour E. *How Shall We Pay for Education?* New York: Harper and Brothers, 1948.

This is a general survey of the problems of financing education written for both economists and educators. The major topics include inflation;

the supply and demand for teachers and educated men and women; sources of finance both for public schools and higher education institutions. Although some of the material is dated, the book is a fundamental one in the field of educational finance.

Harris, Seymour E. (ed.). *Higher Education in the United States—The Economic Problems*. Cambridge, Massachusetts: Harvard University Press, 1960.

This is a compilation of papers presented at a seminar sponsored by the Ford Foundation for varied specialists in the field of higher education. The papers cover such topics as government aid, faculty status, educational and economic values, and investment and endowment policies.

Harris, Seymour E. *Higher Education: Resources and Finance*. New York: McGraw-Hill Book Company, Inc., 1962.

This is a detailed text on the resources and financial aspects of higher education. It deals with history; pricing problems (fees, tuitions, ability to pay); scholarships (amount and use); loans (types and use and programs for credit); government contributions; the management of productive funds (endowments, etc.); costs and economies; and faculty (status, salaries, etc.).

Harris, Seymour E. (ed.). *Education and Public Policy*. Berkeley, California: McCutchan Publishing Corporation, 1965.

This book approaches the topic of education and public policy from the viewpoint of political, qualitative, cost, and governmental issues.

Hartman, Robert W. "Financing the Opportunity to Enter the Educated Labor Market." Chicago: Carnegie Commission on Higher Education, 1972. (mimeo.)

This paper describes three models of higher education financing; determines how each may affect characteristics of graduates; and analyzes the effect of student loan financing on job preferences and participation rates. Lastly, the paper presents some policy implications.

Hartman, Robert W. *Credit for College—Public Policy for Student Loans*. Carnegie Commission on Higher Education. New York: McGraw-Hill Book Company, 1971.

This is a comprehensive study of credit financing for college. The book is organized around the needs, constraints, and benefit distribution of one type of credit system for college: student loans. It concludes that the role of student loans should be a marginal one in college financing.

Hettich, W. "Equalization Grant, Minimum Standards, and Unit Cost Differences in Education." *Yale Economic Essays*, Fall, 1968, 5-55.

Redistribution policies by central governments develop as a response to differences in fiscal capacity and service need among state or local

governments. This article analyzes the relationship between costs, economies of scale and achievement scores of students and relates these variables to state aid to education.

Hickrod, Alan G. "Local Demand for Education: A Critique of School Finance and Economic Research Circa 1959-69." *Review of Educational Research*. February, 1971, 35-49.

This article is an excellent review of three types of major research efforts of the 1960's in the United States: cross-sectional expenditure determination studies; longitudinal expenditure determination studies; and studies using a dependent variable other than expenditure per pupil.

Hirsh, Werner. *Spillover of Public Education Costs and Benefits*. Los Angeles: University of California, 1964.

As the title of this book indicates, it analyzes the spillover of public education cost and benefits to other aspects of society. The costs are analyzed in terms of problems of financing education. The benefits are viewed as the social and personal advantages derived from public education.

Jencks, Christopher and Areen, Judith. "Vouchers and Public Education—An Exchange of Views." *The New Leader*, September, 1971, 7-8.

This article questions two conclusions Robert Lekachman presented in his article of July 1971 in *The New Leader*. They question his view that liberal vouchers would only result in more bureaucratic supervision of schools and that a regulated voucher is politically impractical.

Jencks, Christopher. "Education Vouchers—Giving Parents Money to Pay for Schooling." *The New Republic*, July, 1970, 19-21.

Jencks describes the type of experiment OEO proposed to conduct concerning the use of education vouchers. He describes the kind of voucher to be used and its influence on families of differing incomes and interests. He delineates its probable impact on the present organization of education in the United States.

Johns, Roe *et al. Financing Education—Fiscal and Legal Alternatives*. Columbus, Ohio: Charles E. Merrill Publishing Company, 1972.

This is a compilation of key articles taken from the publication of the four-year National Educational Finance Project which concluded in mid-1972. The authors chose these articles on the basis of general interest for students of educational finance and administration and for superintendents, school board members, legislators, among others. The chapters cover broad areas of financial questions. To name just a few: the development of state support for education; variations in ability and effort to support education; alternative tax sources; alternative finance and provision plans.

Johns, R.L. *Incentive Grant for Quality Education.* Gainesville, Florida: Florida Educational Research and Development Council, 1966.

This monograph describes a grant system based on incentives to encourage school districts to provide education of better quality than the minimum standards now required of them. The data and proposal are concerned only with the State of Florida. But such a grant system is certainly applicable to many other educational systems.

Johns, R.L. and Morphets, E.L. (eds.). *Problems and Issues in Public School Finances.* New York: The National Conference of Professors of Educational Administration, distributed by Bureau of Publications, Teachers College, Columbia University, 1952.

Although dated and oriented toward the U.S., this book covers the broad range of topics involved in understanding public school finance. Some topics covered are costs, taxation, measuring needs, government support and controls, budgetary processes, and administration.

Johnson, Horace E. "Tax Credits and Scholarships for Education." *Business and Government Review,* September-October, 1968, 31-38.

Johnson asks the basic question of how should the country's educational needs be financed. In answering this, he uses the concept of "opportunity cost" to evaluate fiscal alternatives. He presents some fundamental concerns about social goals, tax credits, and scholarships and then presents specific proposals—particularly relevant to low-income students.

Johnstone, Bruce (ed.). *Pay As You Earn—Staff Papers on Income Contingent Lending.* New York: The Ford Foundation, June 1971. (mimeo.) (To appear in published form.)

This reports a study of income contingent loans, specifically the variable term loan within the context of tuition payments. This paper gives a good survey of the literature on student loans and credit for higher education.

Jones, Howard R. *Financing Public Elementary and Secondary Education.* New York: The Center for Applied Research in Education, Inc., 1966.

This book is a good overview for understanding government involvement in educational finance. It discusses how to measure fiscal needs, provides guidelines for state supported schools, issues and problems in the administration of state support, local taxing techniques, and concludes with a general discussion of the role of federal government in financing education.

Krzyzaniak, Marian. *The Long-Run Incidence of Government Spending on Education.* Paper No. 10, Houston: Rice University, 1970.

This paper has two objectives. The first is to determine the combined long-run incidence of a selected tax, the proceeds of which are spent on education. The second is to suggest an aggregate U.S. production function.

Landynski, Jacob W. "Governmental Aid to Non-Public Schools: The Constitutional Conflict Sharpens." *Social Research*, Autumn, 1969, 333-356.

This article focuses on government aid to non-public schools from two viewpoints: constitutionality and public policy. A lucid discussion of the arguments is presented and the author's view that state aid should be given to private and parochial schools is well supported.

Lekachman, Robert. "Vouchers and Public Education." *The New Leader*, July 1971, 9-14.

This article discusses growing parental dissatisfaction with public schools and analyzes various voucher possibilities described by both liberal and conservative proponents. It asserts that the present conservative climate in the U.S. does not make vouchers concerned with equality very plausible.

Levin, Henry M. *Decentralization and the Finance of Inner-City Schools*. Stanford, California: Stanford University, Stanford Center for Research and Development in Teaching, 1969. (ERIC Document No. ED031799).

This study asserts that school districts in the U.S. with the largest proportions of poor and disadvantaged pupils have the least financial resources for education. Evidence shows that the allocation of resources is related to the wealth and power of the population served. This report advocates decentralized schools and community control to improve the financing and effectiveness of inner-city schools.

Levin, Henry M. "The Failure of the Public Schools and the Free Market Remedy." *The Urban Review*, June, 1968.

This article explores proposals that would replace elementary and secondary public schools with a free market strategy for providing education. The author compares private and social gains of the various free market proposals. He then outlines several plans fostering both private and social educational goals to encourage competition among schools.

Lu, Hsien. *Federal Role in Education*. New York: American Press, 1965.

This book tackles a fundamental question in American education: What is and should be the role of the federal government in American education? It thoroughly describes the various kinds of federal aid in the past and in the present (as of 1965), and presents recommendations for the future.

McMahon, W.W. "An Economic Analysis of Major Determinants of Expenditure on Public Education." *Review of Economic Statistics*, August, 1970, 242-252.

This paper provides a theoretical framework for analyzing current expenditures on public primary and secondary education and delineates the interaction of particular determinants.

McIntyre, Charles. "Determinants of Expenditures for Public Higher Education." *National Tax Journal*, June, 1969, 262-272.

The author suggests a model designed to examine possible determinants of interstate variation in expenditures for public higher education. Empirical tests of the model were conducted separately for each of three categories of institutions: universities, four-year colleges, and two-year colleges.

McLure, William P. "Major Issues in School Finance." *Education Administration Quarterly*, Autumn, 1969, 2-14.

This article interprets the current issues in school finance as function of taxation, intergovernmental relations, and non-public schools.

McKinsey and Company, Inc. *Financial Problems of Massachusetts Private Higher Education*. Boston: Commonwealth of Massachusetts, 1970.

This report thoroughly presents the financial status and problems facing private higher educational institutions in the Commonwealth of Massachusetts. It presents projections for income and future expenditures and explores possible financial alternatives for meeting the needs identified in the study. Such possibilities include state, federal, and private sources of funding. The implications of each are also described.

Martin, Reed and Blaschke, Charles. "Contracting for Educational Reform." *Phi Delta Kappan*, March, 1971, 403-405.

This brief article clearly points out some of the legal ramifications of educational contracts.

Merritt, S. "Student Finance in Higher Education." *Economic Journal*, June, 1967, 288-303.

This paper establishes a set of principles for governments to adopt in directing money flows for higher education. Criticisms are anticipated and discussed.

Miner, Jerry. *Social and Economic Factors in Spending for Public Education*. Syracuse, New York: Syracuse University Press, 1963.

This monograph examines the determinants of expenditures for elementary and secondary public education. It develops the economic reasoning used to determine optimal spending levels and identifies factors that influence actual spending by local school systems. It uses public expenditure theory and empirical studies and develops an empirical model for understanding government behavior.

Munger, Frank J. and Fenno, Richard F. *National Politics and Federal Aid to Education*. Syracuse: Syracuse University Press, 1962.

This book combines two subjects—politics and education—often dealt with separately, but which are in reality interwoven. It discusses the political factors affecting general federal aid to elementary and secondary education in the United States. It covers basic issues and contro-

versies of federal aid for education and reviews actions taken by the executive and congressional branches of government that affect education. In conclusion it focuses on the problems and possibilities of continued federal aid.

Mushkin, Selma (ed.). *Economics of Higher Education*. Washington, D.C.: Department of Health, Education, and Welfare, 1962.

Although now 10 years old, this anthology provides excellent background into the major economic concerns of higher education. It deals with the supply and demand of college-trained personnel, investment in human capital, and financial resources available for education. It is heavily documented with tables.

National Conference on School Finance (8th, Chicago, Illinois, 1965). *Trends in Financing Public Education*. Washington, D.C.: National Education Association, Committee on Educational Finance (sponsor), 1965.

This collection of essays contains the current thinking on a variety of topics related to financing public education in the United States. It covers such basic concerns as size-cost and structure, the property tax, decision making in school finance, tools for decision making, cooperative efforts, and political and economic issues.

National Education Association. *Long-Range Planning in School Finance*. Washington, D.C.: National Education Association, 1963.

The articles in this collection focus on the past and future roles of federal, state, and local involvement in school financing as well as intergovernmental relations as they pertain to long-range planning.

National Education Association. *Interdependence in School Finance: The City, The State, The Nation*. Proceedings of the Eleventh National Conference on School Finance. Washington, D.C.: Committee on Educational Finance, 1968.

This is a compilation of papers which deals with many crucial aspects of the large issue of intergovernmental relationships for financing education. The papers are written by leading specialists in the field. Although focusing on United States concerns, the issues are valid for all countries.

National Education Association. *Special Problems in Financing Rural Education*. Washington, D.C.: National Education Association, 1963.

Sparse, migrant, and ethnic populations make financing and provision of education difficult in rural areas. This pamphlet asserts that rural school boards should have the freedom to establish educational programs to meet the special problems of their area while being amply supported financially by higher level governments.

National Conference on School Finance (9th, Chicago, Illinois, April 3-5,

1966). *Proceedings: Local-State-Federal Partnership in School Finance.* Washington, D.C.: National Education Association, 1966.

The conference concerned improving intergovernmental relationships in education. Some topics of the proceedings included the educational finance problems that involve intergovernmental relationships.

National Educational Association. *Financing Education: Who Benefits? Who Pays?* Proceedings of the 15th National Conference on School Finance, 1972. Washington, D.C.: National Educational Association, Committee on Educational Finance, 1972.

This is a compilation of papers which deals with the general question of the sources of funds and the distribution of the responsibility to furnish those funds. In addition, it also touches on various financing techniques such as bonds and contracting, and it touches on financial planning and administration issues by discussing PPBS.

Netzer, Dick. *Long-Range Financing of Public Broadcasting.* New York: National Citizens Committee for Broadcasting, n/d.

This study explores various ways to finance public broadcasting on a stable long-term basis. Various governmental and non-governmental alternatives are evaluated in terms of several criteria: adequacy of yield; year-to-year stability; growth over time; effects on low-income households; other economic effects; link with benefits.

The National Education Finance Project, Gainesville, Florida. Roe L. Johns, Director; Kern Alexander, Associate Director.

—Vol. 1, *Dimensions of Educational Need.* Roe L. Johns, Kern Alexander, and Richard Rossmiller, eds., 1969.

—Vol. 2, *Economic Factors Affecting the Finance of Education.* Roe L. Johns, Irving J. Goffman, Kern Alexander, and Dewey H. Stollar, eds., 1970.

—Vol. 3, *Planning to Finance Education,* Roe L. Johns, Kern Alexander, and K. Forbis Jordan, eds., 1971.

—Vol. 4, *Status and Impact of Educational Finance Programs.* Roe L. Johns, Kern Alexander, and Dewey H. Stollar, eds., 1971.

—Vol. 5, *Alternative Programs for Financing Education.* Roe L. Johns and Kern Alexander, 1971.

—*Summary Volume, Future Directions for School Financing: A Response to Demands for Fiscal Equity in American Education,* 1971.

—*Data Volume, Personal Income by School Districts in the United States,* 1971.

The National Educational Finance Project (NEFP) was the first comprehensive national study of public school finance since 1933. Its goals were as large as its funding; they were to: (1) identify the dimensions of educational need in the nation; (2) identify target populations with special educational needs; (3) measure cost differentials among different educational programs; (4) relate the variations in educational needs

and costs to the ability of school districts, states, and the federal government to support education; (5) analyze economic factors affecting the financing of education; (6) evaluate present state and federal programs for the financing of education; and (7) construct alternative school finance models, both state and federal, and analyze the consequence of each. (Vol. 5, p. vii). The results would be a body of data and a methodology to evaluate and improve the financing of public education. The work found in these volumes can be divided into 2 parts: one identifies "target populations" to be served by special programs, to indicate appropriate educational programs for these populations and to measure cost differentials between special programs and regular education. Volume 3 contains summaries of these satellite projects investigating the various levels of education from pre-school to junior college. The second part describes federal and state programs for school support in order to determine how well they equalize expenditures. Volume 4 deals with this. Volume 5 presents simulations of federal and state aid programs to illustrate the relative equalizing power of proposed alternatives. Volume 2 contains 11 essays summarizing research topics of special concern to economists. Volume 1 provides some history. In addition, there is a volume containing data for 1967-68 on personal income by income class for all school districts in the U.S. There is also a summary volume.

Norton, John K. *Dimensions in School Finance*. Washington, D.C.: National Education Association, 1966.

This report reviews the major trends in local, state, and federal school finance programs from the mid-1950's to mid-1960's in the U.S. It consists of excerpts from material written by the Association. It deals with many aspects of educational finance problems such as raising and distributing resources.

Orwig, M.D. (ed.). *Financing Higher Education: Alternatives for the Federal Government*. Iowa City, Iowa: American College Testing Program, 1971.

This is a collection of essays that develops the central issues in financing higher education. The book is divided into 4 parts: the Economic and Social Backgrounds; Who Should Pay: Alternative Strategies for Financing Higher Education; Alternatives for the Federal Government; and the Road Ahead. Some contributors are Theodore Schultz, Christopher Jencks, Howard Bowen, Robert Hartman, and M.D. Orwig.

Owen, J.D. "The Distribution of Educational Resources in Large American Cities." *Journal of Human Resources*, Winter, 1972, 26-38.

This reports an empirical analysis of data for 9 large U.S. cities showing that teacher salary expenditures per pupil are lower in poor neighborhoods than wealthier ones. The inequality of resources is explained by the teacher assignment system used in these cities.

Pauly, Mark. "Mixed Public and Private Financing of Education: Efficiency and Feasibility." *American Economic Review*, March, 1967, 120-130.

In the U.S., government support for basic education has been generally accepted. With this is the assumption that each child has access to equal publicly supported facilities. This paper shows that if efficiency considerations are paramount over ethical ones, unequal public support is necessary under many circumstances. Comments to this article were made by Walter Hettich in "Mixed Public and Private Finance of Education: Comment." *American Economic Review*, March, 1969, and Mark Pauly replied to these comments in Pauly, Mark. "Reply" (to Hettich, 69), *American Economic Review*, March, 1969.

Peterson, Leroy J. *et al. Economic Impact of State Support Models on Educational Finance*. Madison, Wisconsin: University of Wisconsin, School of Education, 1963.

This book reports a study designed both to understand the impact of present federal and state financial support patterns for education and to devise a method for analyzing the impacts of a support pattern. Several conclusions are presented concerning equity, fiscal capacity, and local responsibility for education.

Rossmilier, Richard, *et al. Fiscal Capacity and Educational Finance*. Madison, Wisconsin: University of Wisconsin, 1970.

This book reports the methodology, data analysis, and funding of a study designed to gather data for a larger study evaluating the impact of school finance models on various types of school districts. The study reported in this book was designed to identify and summarize the most recent available data on the relative fiscal capacity and tax effort of all 50 states in the United States; to do the same for school districts serving areas with particular economic and demographic characteristics when alternative measures of fiscal capacity are used; and to do the same for school districts when expenditures for public services by units of local government are considered.

Reimer, Everett. "An Essay on Alternatives in Education." Seminar given at Cuernavaca, Mexico, Centro Intercultural de Documentacion, 1970.

The author discusses what is inherently wrong with educational processes today and presents arguments for ways to change the system. One chapter is devoted to financing and sets out the logical groundwork for education vouchers.

Rivlin, Alice. *Toward a Long-Range Plan for Federal Financial Support for Higher Education*. Washington, D.C.: Health, Education, and Welfare. 1969.

This report proposed that the federal government offer loans to students that would be repayable according to a fixed schedule of equal or graduated payments. There is an income contingent plan to accommodate the repayments to the students' income.

Rivlin, Alice. *The Role of the Federal Government in Financing Higher Education*. Washington, D.C.: The Brookings Institution, 1961.

This monograph provides a background on the United States federal government's role in financing higher education by outlining the history of federal programs, describing different financial arrangements, and by pointing out the principal issues involved.

Shell, Karl *et al. The Educational Opportunity Bank: An Economic Analysis of a Contingent Repayment Loan Program for Higher Education.* Cambridge, Massachusetts: MIT, Working Paper, Department of Economics, 1967. (mimeo.)

This paper reports the findings of a study investigating the feasibility and desirability of an Educational Opportunity Bank. It discussed the allocational and distributional effects of the Educational Opportunity Bank, the problems of women using it, the repayment rates, and the fiscal impact of the Bank.

Sokol, John and Lohman, Maurice. *Computational Exercises in School Finance.* New York: Teachers College Press, 1966.

This book helps to develop a student's familiarity with the basic problems of school finance and to increase his skill in solving them. It sets up practical exercises for calculation so that students can gain an understanding of the use of analysis techniques.

Stake, Robert E. "Testing Hazards in Performance Contracting." *Phi Delta Kappan,* June, 1971, 583-589.

Although most of the articles on educational contracting criticize its theory, this article carefully examines one operational area. It looks at the statistical weaknesses and the test limitations involved in determining whether or not a contract has been fulfilled.

Stern, David. "Effects of Alternative State Aid Formulas on the Distribution of Public School Expenditures in Massachusetts." *The Review of Economics and Statistics,* February, 1973, 91-98.

Because a few U.S. state supreme courts have ruled that financing public schools through the property tax is unconstitutional, new methods of finance need to be developed. This article is concerned with how the amount of expenditures by local school districts would respond to alternative forms of state aid given in various combinations of matching and block grants. This article presents an econometric model of local school districts' expenditures in the state of Massachusetts. The model is designed to permit simulation of alternative formulas for distributing general purpose state aid. The model gives evidence that block grants may be more stimulating than matching grants. The paper also reports the results of simulating a "power equalizing" formula.

Struyk, Raymond J. "Effects of State Grants-In-Aid on Local Provision of Education and Welfare Services in New Jersey." *Journal of Regional Science,* August, 1970, 225-235.

This paper reports exploratory research on an aspect of the fundamental question of fiscal relationships between state and local governments. The study here concerns the extent to which local government expenditures for education, welfare, and health and hospital groups have been stimulated by the state grant-in-aid system in one state, New Jersey. A model to analyze the effects of state aid on countries and schools is developed. The paper also analyzes the effects of state transfers on the local provision of welfare-related services. Lastly, the paper draws some conclusions and suggests further research.

Stubblebine, Wm. Craig. "Institutional Elements in the Financing of Education." *The Southern Economic Journal*, July, 1965, 15-34.

This article reports the findings of a study comparing forms of financing in terms of both public and private funds generated in support of education. The forms compared are full private funds, full public funding, and combination funding.

"Symposium on Financing Higher Education." *Public Interest*, Spring, 1968, 99-136.

The articles in this Symposium in alphabetical order are the following:

Botton, Roger. "Burdens and Bargains in Higher Education"
Coleman, James. "Benefits, Costs, and Equity"
Friedman, Milton. "The Higher Schooling in America"
Henderson, Algo. "Planning for Subsidies"
Hitch, Charles J. "The Need for New Guidelines"
Kerr, Clark. "The Distribution of Money and Power"
Meyerson, Martin. "A Changing Economy for Higher Education"
Moos, Malcolm. "The Need for Direct and Substantial Aid"
Sizer, Theodore. "Financing the College: How and Why"
Truman, David. "Autonomy with Accountability"

The titles of these articles indicate that this Symposium covers a broad range of issues involved in financing higher education and provides diverse viewpoints. The articles are well written, clear and provide an excellent introduction to the problems of financing higher education.

Schultz, T.W. "Resources for Higher Education: An Economist's View." *Journal of Political Economics*, May/June, 1968, 327-347.

This paper aims at clarifying the factors relevant in allocating resources to higher education in order to strengthen more efficient allocation of funds.

Tiedt, Sidney. *The Role of the Federal Government in Education*. New York: Oxford University Press, 1966.

This book focuses on varied aspects of the role of the federal government in education in the U.S. by looking at the history of federal aid to education, the arguments for and against assistance, the specific issues concerning aid to private and parochial schools, and the federal activities for education during the Kennedy-Johnson Administration.

U.S. Senate. Select Committee on Equal Education Opportunity. *The Financial Aspects of Equality of Educational Opportunity and Inequities in School Finance*. Washington, D.C.: Government Printing Office, 1972.

This report discusses the partnership of federal, state, and local government for financing education in the U.S. and discusses the ways in which that system contributes to educational inequities. It offers some suggestions for moving toward more equitable patterns of school finance.

U.S. National Center for Educational Communication. *Educational Performance Contracting*. No. 28 in a Series of PREP Reports. Washington, D.C.: Department of Health, Education, and Welfare, n/d. (Adapted from the Report, *The Performance Contracting Concept in Education* by J.P. Stucker and G.R. Hale of the Rand Corporation, Santa Monica, California, n/d.)

This pamphlet is divided into three parts. The first describes the purposes of performance contracting, types of contracts, the contract selection process. The second discusses the problems and possibilities of one type of contracting: contracting for student achievement. The third section describes current programs in contracting for student achievement.

U.S. Congress. Senate. *Equality of Educational Opportunity 1971*. Hearings before the Select Committee on Equal Educational Opportunity, 92nd Congress first session on Equal Educational Opportunity, Part 16C—Inequality in School Finance. Washington, D.C.: Government Printing Office, 1971.

This volume consists of a monograph entitled *Schools and Inequality* written by The Urban Coalition and James Guthrie, George Kleindorfer, Henry Levin and Robert Stone in 1969. It reports the results of a study to understand the social and economic forces which influence schools and in turn the influence schools have on their students. The location for the study was the State of Michigan. A significant section of this study is devoted to the financial factors influencing inequality.

U.S. Congress. Joint Committee. *The Economics and Financing of Higher Education in the U.S. A Compendium of Papers*. Washington, D.C.: Government Printing Office, 1969.

As the title indicates, this is a compendium of papers by leading specialists in educational finance concerning the financing of higher education. It deals with economics and public financing of higher education, equity problems, costs, pressures on private institutions, and non-federal financial strategies for the future.

United States. Advisory Commission on Intergovernmental Relations. *State Aid to Local Government*. A Commission report. Washington, D.C.: Government Printing Office, 1969.

This report studies the proper allocation of responsibility for financing

the cost of intergovernmental programs among the three major levels of government. The local property tax, which is the primary underwriter of the local school system is no longer satisfactory and growth in local expenditures has exceeded state aid. The report recommends that the Federal Government assume full financial responsibility for the public assistance function. States should become the prime financial source for elementary and secondary education costs.

Wise, Arthur E. *Rich Schools, Poor Schools: The Promise of Equal Educational Opportunity*. Chicago: University of Chicago Press, 1968.

This book examines the question of whether the equal protection clause of the 14th amendment to the U.S. Constitution may be held to require substantial equalization of educational opportunity within the states. With the view that educational opportunity is largely related to the wealth of the tax base of a community, this book presents both the financial as well as legal implications of equal educational opportunity.

Zacharias, Jerrold R. *Report—Educational Opportunity Bank: A Report of the Panel on Educational Innovation in the U.S.* Washington, D.C.: Government Printing Office, 1967.

This report suggests the establishment of a federalized student loan bank entitled to borrow at government rates and loan to students in exchange for a percentage of the student's income.

EDUCATIONAL FINANCE—OTHER COUNTRIES

Adaralegbe, Adeniji. "Problems and Issues in Financing Education in Nigeria." *West African Journal of Education*, Summer, 1972, 19-38.

This article examines the basis for fiscal support for the Nigerian educational system, some of the problems of financing the system, and suggests some alternatives for improving the present situation given increased demand for education.

Anderson, John E. "The Organization and the Financing of Self-Help Education in Kenya." Paris: IIEP, 1970. (mimeo.)

Anderson conducted a study to investigate the impact and utility of the community self-help factor in education. He used Kenya as a case example. The report provides an historical survey of the self-help concept in education and discusses the organization and control of education at the primary, secondary, and day-care levels, the financing of such educational levels and the use of self-help at these three educational levels.

Arnold, H.J.P. *Aid for Developing Countries—A Comparative Study*. London: The Bodley Head, 1962.

This book describes the aid given to developing nations by the U.S., Britain, the Soviet bloc, and international organizations. Although it

does not specifically deal with aid for education, it does provide basic background reading.

Bacchus, M.K. "Changing Attitudes to Educational Expenditure in a Developing Nation." *Social and Economic Studies*, June, 1971, 164-175.

This article describes the changes in attitudes about educational expenditures in Guyana and outlines the factors causing these changes.

Bacchus, M.K. "Patterns of Educational Expenditure in an Emergent Nation: A Study of Guyana 1945-65." *Social and Economic Studies*, September, 1969, 282-301.

This article reports the findings of a study examining the changing patterns of educational expenditures in both the recurrent and capital budgets between 1945 and 1965 in Guyana.

Beales, A.C.F.; Blaug, Mark; Veale, Douglas; West, E.G. *Education: A Framework for Choice*. London: Institute of Economic Affairs, 1970.

This is the second edition of a collection of papers on the historical, economic, and administrative aspects of choice in education and the financial ramifications of such choice.

Benson, Charles. *Finance of Education—Training and Related Service in the Public Sector*. Karachi, Pakistan: Planning Commission, 1970.

This document was compiled to aid in the formulation of the fourth 5-year plan in Pakistan. It analyzes the problem of public educational finance from both an aggregate view as well as different categories within the "knowledge industry." It deals separately with development and recurrent expenditures and provides a comprehensive picture of educational finance in Pakistan.

Bereday, George Z.F. (ed.). *Essays on World Education: The Crisis of Supply and Demand*. New York: Oxford University Press, 1969.

These papers were prepared for the 1967 International Conference on Education in Williamsburg, Virginia. They concern the question of inadequacies of educational supply. The essays discuss educational problems on specific continents, technological innovation, improved utilization of teachers, and also general purposes of education.

Blaug, Mark. "The Rate of Return on Investment in Education in Great Britain." *The Manchester School*, September, 1965, 205-261.

This article defends the usefulness of the investment approach to education by attempting to counter the objections raised against it. There are six major objections and each is examined in detail to show that none is a convincing argument.

Bowen, William (ed.). *Economic Aspects of Education—Three Essays*. Princeton, New Jersey: Industrial Relations Section, Princeton University, 1964.

These essays deal with alternative approaches for assessing the economic contribution of education, implications of financial arrangements for universities in Great Britain and France, and salary differentials in British universities.

Burns, Barbara *et al. Higher Education in Nine Countries.* New York: McGraw-Hill Book Company, 1971.

This book compares the higher education systems of eight industrialized countries and one largely populated developing country. The comparisons involve descriptions of the organization of higher education in each country, enrollment trends, staff-student ratios, financial support mechanisms, internal administration, and higher education's relationship to economic planning.

Butts, R. Freeman. *American Education in International Development.* New York: Harper and Row Publishers, 1963.

Through a personal account, the author describes what he believes to be the three main stages of American educational involvement with other nations since World War II. The stages he describes are: increasing the interchange of cultures, educational technical assistance subordinate to military aid, and overseas educational service responding to new recognition of great educational needs. Finances are dealt with only indirectly.

Calloway, A. and Musone, A. *Financing of Education in Nigeria.* Belgium: UNESCO, 1968.

This book gives a comprehensive picture of the financing of education in Nigeria. It provides a general analysis of educational expenditures and then discusses the financing of types of education: primary, secondary, teacher training, technical and vocational, and higher. In addition, it includes a discussion of external aid to Nigeria and concludes with trends, problems, and issues in educational planning in that country.

Cerych, Ladislav. *The Integration of External Assistance with Educational Planning in Nigeria.* Belgium: UNESCO, International Institute for Educational Planning, 1967.

This book looks at the broad question of the relationship of external aid to educational planning and takes Nigeria as a case example. The book examines the role that external aid plays in the development of Nigerian education and analyzes the policy and methodological problems raised from the interaction of external aid and educational planning.

Cerych, Ladislav. *L'aide Exterieure et la Planification de l'education en Cote-d'Ivoire.* Paris: UNESCO, 1966.

This publication provides a thorough description of foreign aid activity in the Ivory Coast, particularly the costs of aid and the types of education receiving aid.

Cerych Ladislav. *Problems of Aid to Education in Developing Countries.* New York: Frederick A. Praeger, Publishers, 1965.

This study defines the essential features of a consistent policy of external aid to education, ways to make aid more effective and ways to extend it and coordinate it internationally. This discussion includes: needs, the role of external aid in the different sectors of education, forms and means of educational aid, and organizational and institutional frameworks for extending aid.

Chaube, S.P. *Comparative Education—A Study of Some Contemporary National Systems of Education.* Agra: Ram Prasad and Sons, 1965.

Chaube surveys the educational systems of the United States, France, USSR, Japan, China, Turkey, and Great Britain. Specific chapters in his book are devoted to financial arrangements of the educational systems in these countries.

Cochrane, D. "The Cost of University Education." *Economic Record,* June, 1968, 137-153.

This paper is a copy of the presidential address given to the economics section of the Australian and New Zealand Association for the Advancement of Science. The paper provides the rationale behind attempts to measure social and private rates of return from education. An analysis is made of the ways in which universities adjust to the resources available. It concludes with an examination of sources of university finance and provides suggestions for financing students through loan schemes.

Commission to the Association of Universities and Colleges of Canada. *Financing Higher Education in Canada.* Toronto: University of Toronto Press, 1965.

The Canadian Universities Foundation appointed this Commission to estimate the financial needs of the Canadian universities and to recommend means of supplying them with sufficient funds. In fulfilling this assignment, the commission reported enrollment projections and plans, problems of finance, review of funding sources, and provided recommendations to the federal and provincial governments, to the universities, and to the private sector.

Congreso Panamericano de Credito Educativo. *I, El Credito Educativo en America Latina.* Bogota, Colombia: ICETEX, 1969.

This book contains the proceedings from the first formal Latin American Conference on educational credit. Two topics recorded here relevant to financing education were the financial aspects of educational exchange and the role of the private sector in educational credit.

Congreso Panamericano de Credito Educativo. *II, Asamblea Constitutiva de APICE.* Caracas: ICETEX, 1969.

This book contains the proceedings from the second Latin American

Conference on educational credit. It provides reports from educational credit institutions. In addition, some relevant topics in the publication are the financial crisis of higher education in Latin America, and educational credit as an alternative for financing higher education.

Congreso Panamericano de Credito Educativo. *III, El Credito Educativo y la Optimizacion de los Recursos Humanos*. Bogota, Colombia: ICETEX, 1970.

These proceedings from the third Latin American Conference on educational credit concern the broad topic of credit and human resources. One chapter deals with government financial assistance to students. This book also includes a proposal to establish an Inter-American Educational Development Bank.

Coombs, Philip and Bigelow, Karl. *Education and Foreign Aid*. The Burton and Inglis Lectures, Harvard University, Cambridge, Massachusetts, 1963-64.

This book is composed of two lectures of men experienced in the field of United States foreign aid. Dr. Coombs' lecture is a frank examination of American aid along with suggestions for improving it. Dr. Bigelow's lecture concentrating on the needs for secondary education in Africa is not within the scope of this bibliography.

Coombs, Philip. *The World Educational Crisis—A Systems Analysis*. New York: Oxford University Press, 1968.

This book describes the crisis in education from the viewpoint of systems analysis. It analyzes the inputs (students, teachers, and money) and the relevancy of outputs to needs. In addition, it looks at various aspects of the administration of an educational system along with non-formal education and the necessity for international cooperation.

Cramer, John F. and Brown, George S. *Contemporary Education—A Comparative Study of National Systems*. New York: Harcourt, Brace and World, Inc., 1965.

This book comparing educational systems of the major developed countries is divided into four parts. The first provides the basic characteristics of the systems; the second describes administration, control, and finance; the third describes the operations of the schools themselves; the fourth focusses on three Asian nations that are meeting educational problems in special ways.

Doroesman, Ruth. *Sources and Uses of Educational Finance in Indonesia*. Canberra, Australia: Australian National University 1971. (Appeared in *The Bulletin of Indonesian Economic Studies*, November, 1971.)

This paper explores possible explanations for the fact that a country with fairly high enrollment ratios spends so small a fraction of its GNP on its education. To do this, it provides a thorough description of the financing of education in Indonesia.

Dutta, Upendra. *Financing Higher Education in Nepal.* Unpublished Ph.D. Dissertation, University of Oregon, 1964.

This thesis is a thorough description of higher education in Nepal. Specific chapters are devoted to types of financial support and to the problems of financing higher education in Nepal.

Fauré, Edgar *et al. Learning to Be—The World of Education Today and Tomorrow.* Paris: UNESCO and London: George G. Harrap and Co. Ltd., 1972.

The purpose of this study is a critical reflection by men of different origins and backgrounds on the overall solutions to the major problems involved in the development of education in a changing world. This report commonly called the "Fauré Report" does exactly this and covers all pertinent aspects of education. It is divided into three parts. Part I assesses education in 1972 and discerns common characteristics. It also discusses educational progress and "dead-ends" in terms of needs, expansion limitations and resource potential. This first section concludes with a discussion of four schools of thought about the role of education in society. Part II concerns the future. It deals with such topics as challenges for the future and new educational research findings, developments, and inventions. It concludes with a discussion of future goals for education. Part III discusses the types, roles, and functions of "educational strategies," policy alternatives, and financial options. The final section of the book closes with a discussion of both administrative and financial arrangements for educational cooperation.

Ferns, H.S. *Toward An Independent University: A View of the Urgent Need for Establishing an Institution of Higher Education Free from Government Control.* Occasional Paper #25. London: Institute of Economic Affairs, 1969.

This essay argues for the establishment of a British university free of government control, to be financed solely by student fees.

Foster, Philip. *Education and Social Change in Ghana.* London: Routledge and Kegan Paul, 1965.

Foster describes the educational system of Ghana both before and after independence. He particularly focuses on secondary education and its effects on social change in the country. Financial considerations are interspersed within his general focus on social change.

Frankel, Charles. *The Neglected Aspect of Foreign Affairs—American Educational and Cultural Policy Abroad.* Washington, D.C.: The Brookings Institution, 1965.

This book examines the fundamental principles behind United States government educational and cultural aid to developing countries. Suggestions for change are offered as examples within the discussion of present and preferred principles underlying aid.

Goldwin, Robert A. (ed.). *Why Foreign Aid?* Chicago: Rand McNally and Company, 1962.

This collection of essays and two U.S. presidential messages together deal with the basic questions about the objectives of aid and its relation to foreign affairs.

Guillaumont, P. et *al. Les Depenses d'enseignement au Senegal.* Paris: UNESCO, 1967.

This publication provides a clear overview of the educational system in Senegal. The third chapter concentrates on finances. It includes the distribution of funds as well as foreign aid assistance.

Hailey, Lord William Malcolm. *An African Survey.* A Study of Problems Arising in Africa South of the Sahara. Revised, 1956. Oxford University Press, 1957.

An excellent comprehensive survey describing the African countries south of the Sahara from their topography to their social institutions. Hailey devotes one extensive chapter to describing educational systems that includes a description of the financial arrangements of education in these countries. Although the book is dated, it serves as excellent background material.

Hallak, J. and Poignant, R. *Les Aspects Financiers de l'education en Cote-d'Ivoire.* Paris: UNESCO, 1966.

This publication provides a clear overview of the financial aspects of education in the Ivory Coast. It discusses expenditures and financial arrangements as well as costs.

Hallak, Jacques and Poignant, Raymond. *Les aspects financiers de l'enseignement dans les pays africains d'expression francaise.* Paris: UNESCO, Institute International de Planification de l'Education, 1966.

This study is a comprehensive description of the financial aspects of education in the French-speaking African countries. It covers such topics as educational effort, expenditures, financial arrangements, national resources, foreign aid, and costs.

"The Implementation of the New System of Finances in Education." *Yugoslavenski Pregled,* October, 1969, 423-426. (translation)

This article describes the decentralized system of financing education recently instituted in the republics of Yugoslavia. In addition, it presents some of the problems of centralized long-term planning within a decentralized financial system.

Kayode, M. O. "Towards a Principle of Financial Allocation in Educational Planning." *West African Journal of Education,* Summer, 1972, 11-17.

This article provides a theoretical framework for more objective answers to some of the pressing questions about the financial organization and benefits of education. It first establishes the assumption that financial

organization has to be closely tied to the benefits of education. It then discusses the characteristics of the benefits from education. It also provides guidelines for expenditures for a developing country using Nigeria as a case example.

Knight, John B. *The Costing and Financing of Educational Development in Tanzania*. Paris: UNESCO, 1966.

This publication provides a fine description of the financial aspects of the educational system in Tanzania. In addition to the introduction which explains sources and allocation of revenue, the book discusses the recurrent revenue and expenditures, the projected recurrent expenditures, and the capital revenue and expenditures of each educational sector: primary, secondary, technical, teacher training and higher education.

Liang, Shang Yung. *Provincial Financing of Public Education in Taiwan, China: An Evaluation and a Proposed Plan*. Unpublished Ph.D. Dissertation, University of Missouri, 1963.

The purpose of this dissertation was to formulate a program of provincial support for local public education in Taiwan, China. For a better understanding of the proposal, the author first describes the historical development of financial support for local public education in Taiwan and describes present methods of state or provincial financial support and distribution for local public education in selected developed countries.

Macbeth, A.M. Educational Finance. "Some Difficulties of Comparison." *Comparative Education*, March, 1968, 125-133.

This article warns the reader against accepting all financial statistics about education as valid and enumerates some of the problems arising when financial aspects of educational systems of different countries are compared.

Mengot, Ako Defang. *Financing Primary Education from Local Education Rates in West Cameroon*. Unpublished Ph.D. Dissertation, Harvard University, School of Education, 1971.

This thesis describes the problems of financing primary and secondary education in West Cameroon from post-World War II to the present. It also describes local education rates as a source of financing and analyzes the advantages and disadvantages of using them.

Michie, Allan A. *Higher Education and World Affairs*. New York: Education and World Affairs, 1968.

This pamphlet serves as an introduction to those interested in international education. It includes a survey of the diverse activities which make up international education, some common strengths and weaknesses of institutions involved in such programs and finally describes the variety of governmental and private resources available to educa-

tional institutions interested in programs in international education. This pamphlet also includes an extensive bibliography focusing on the content of programs rather than their financial aspects.

Orata, Pedro. *Self-Help Barrio High Schools*. Singapore: Eastern Universities Press for SEAMEO Regional Center for Educational Innovation and Technology, 1972.

This book describes the successful efforts of special self-supporting high schools in the Philippines. These high schools use the resources of the community along with money-making projects that students organize to make the schools self-sufficient. Along with the financial utility of such projects, the students acquire initiative and occupational skills from these projects along with the academic skills learned in the school.

Organization of American States. *El Credito Educativo en America*. Washington, D.C.: Organization of American States, 1970.

This is a comprehensive country-by-country review of educational credit institutions. It has such information as name, address, purposes, functions, and legal structure as well as a description of programs.

OECD. *Aid to Education in Less Developed Countries*. Paris: OECD, 1971.

This publication provides an up-to-date survey of aid to education for developing countries given by members of DAC. It develops a clear picture of educational needs, the forms of aid given, and general policy trends.

OECD. *Analysis of the Methods of Financing Higher Education and Some of Their Implications*. Paris: OECD, 1971. (mimeo.)

This paper describes some features of the educational financing systems of DAC member countries. It also discusses sources of financing, methods of collecting and allocating funds, private sector involvement and increasing availability of resources.

OECD. *Costs and Financing of Post-Secondary Education*. Paris: OECD, 1971. (mimeo.)

This paper gives information on the cost of financing of post-secondary education and on the financial implications of its current and future expansion. The chapters concern basic data on expenditure growth, sources of finance, and some financial implications of some educational innovations.

OECD. *Development Assistance—1969 Review*. Paris: OECD, 1969.

This study, one of a series published bi-annually by OECD, surveys efforts and policies of DAC members in development assistance. The chapter on recent trends in economic and social development of developing countries has a section concerned with education and the chapter on key policy issues focusses on external aid to education.

OECD. *Development Assistance—1971 Review*. Paris: OECD, 1971.

This study, one of a series published bi-annually by OECD, reviews the efforts and policies of development assistance of its DAC members. It gives a general overview of effort, discusses the flow of financial resources, volume trends in the 1970's, private capital flows, technology development, coordination of possibilities for aid. Some of which is applicable to educational concerns.

OECD. *Economic Aspects of Higher Education*. Paris: OECD, 1964.

This book discusses some economic aspects of higher education as they relate to manpower. Part I describes such problems as demand for higher education, internal efficiency, returns on investments growth. Part II is a collection of articles on special aspects of higher education and manpower.

OECD. *Financing Education for Economic Growth*. Paris: OECD, 1964.

This fine anthology is the product of an OECD conference. It covers topics related to educational finance and includes essays by such educational finance experts as Debeauvais, Harris, Mushkin, Prest, and Vaizey. The book is divided into three parts: Part I is devoted to concepts and statistical aspects of financing education in developing countries. Part II comprising the bulk of the book, provides case studies of financing methods in developed countries: France, Norway, the United Kingdom and Germany. It also has essays on student financing measures, state and local financing and forecasts of the financial implications of expanding education. Part III provides summary reports with policy implications.

OECD. *Innovation in Higher Education—Reforms in Yugoslavia*. Paris: OECD, 1970.

This publication provides a thorough description of Yugoslavia's higher educational system, the need, aims and history of reform, and the specific problems of innovation that Yugoslavia faces in implementing its reforms.

OECD. *Resources for the Developing World—1962-68*. Paris: OECD, 1969.

This is a report of the flow of financial resources to developing countries and serves as a basic reference document on the assistance programs of individual donor countries and on overall official and private financial aid. It contains detailed, descriptive, and statistical material. The statistics are now becoming outdated but it provides an excellent picture of the recent past.

OECD. *Technical Assistance and the Needs of Developing Countries*. Paris: OECD, 1968.

This study reviews the availability and reliability of information concerning developing country needs for technical assistance. In addition,

it identifies the essential skills needed for economic growth in developing countries and also considers the balance between technical and capital assistance in the total aid given by DAC members as of 1968.

Robinson, E.A.G. and Vaizey, John E. (eds.). *The Economics of Education*. New York: St. Martin's Press, 1966.

This book is comprised of the proceedings of a conference held by the International Economic Association in 1966. As a collection of essays it covers a variety of topics about education such as expenditures, the relationship of education to economic progress, demand and supply problems, costs, the balance of resources for different kinds of education, and also international aid.

Rockefeller Foundation and Ford Foundation. *Education and Development Reconsidered*. Two volumes prepared for a conference at the Villa Serelloni, Bellagio, Italy, May 1972. (mimeo.)

These two volumes provide both an excellent background to problems and a clear summary of new policies under consideration concerning economic and social development from the viewpoints of both recipients and donors. It covers such topics as: investment in education; social justice and cultural dependency; non-formal education; research and development; higher education; and national development. Volume One summarizes the issues in each subject area and Volume Two provides the papers that were presented at the conference.

Rogers, Daniel C. *Education Sector Loans: Past and Future*. Washington, D.C.: AID, Bureau for Program and Policy Coordination, Economic Analysis Division, October, 1971. (mimeo.)

This paper stresses the goals, techniques, problems, and potentialities of the "educational sector loan" a new financing method for aiding the whole educational sector of a developing country.

Rogers, Daniel C. *An Evaluation of Student Loan Programs*. Washington, D.C.: AID, Bureau for Program and Policy Coordination, Economic Analysis Division, February, 1972. (mimeo.)

This paper is a continuation of a study of 12 student loan institutions in Latin America. It evaluates the achievement of basic student loan objectives as outlined by the author and evaluates the financial future of these 12 loan programs.

Rogers, Daniel. "Financing Higher Education in Less Developed Countries." *Comparative Education Review*, February, 1971, 20-27.

This paper discusses the financing of higher education and its effects on developing countries. It first describes the present situation and then several alternative methods of financing. It concludes with a description of the advantages and disadvantages derived from changing the method of financing education.

Rogers, Daniel. *A Brief Description of Student Loan Programs in Latin America*. Washington, D.C.: AID, 1971. (mimeo.)

This report, as the title indicates, is a brief description of student loan programs in Latin America. It describes the purposes and programs and draws some general conclusions.

Rogers, Daniel. "Student Loan Programs and the Returns to Investment in Higher Levels of Education in Kenya," *Economic Development and Cultural Change*, January, 1972, 243-259.

This article investigates the private rates of return to higher levels of education in Kenya. Then it examines the rates of return which would prevail under various systems of financing higher education with student loans to determine the economic feasibility of these alternatives for Kenya.

Rogers, Daniel. *An Evaluation of Student Loan Programs*. Washington, D.C.: AID, October, 1971. (mimeo.)

This paper evaluates institutions or programs which award loans to students in developing countries. At the time of writing, the only programs of this kind were in Latin Amer..a. In addition to evaluating them according to their social objectives, the author also considers financial concerns.

Rowley, C.K. "The Political Economy of British Education," *Scottish Journal of Political Economy*, June, 1969, 152-176.

The author states that there is an ongoing controversy about the nature of education in Great Britain. Debates have been within the framework of two postulates underlying British educational policy: that formal schooling should be compulsory and free and that it should be provided by the state. This essay re-examines the economic case for state provision of "free education" and discusses the economic issues underlying the system of British education. It discusses such questions as "Is state intervention into education justified?" and questions whether government is always the impartial servant of the public good.

Rudolp, Hedwig. *Financial Aspects of Recurrent Education*. Paris: OECD, 1971. (mimeo.)

This paper with a brief outline of the functions of financial mechanisms considers the possible relationship between particular interest groups and an educational system. It then concentrates on discussing alternative forms of financing and their respective implications both in the short and long run.

Sekhri, Sudershan Kumari. *An Analysis of the Role of Local and State Governments in the Finance and Administration of Primary Education in India*. Unpublished Ph.D. Dissertation, University of California, 1967.

The purpose of this dissertation is to identify and analyze the fiscal

problems related to the implementation of compulsory primary education in six states of India as well as to draw general policy recommendations, based on prior analysis, for the systems of administration and finance which might increase efficiency. To this end, state and local effort in primary education is described; the state grant-in-aid system is discussed and a detailed discussion of the events that lead to the expansion of universal primary education in India is included.

Sharp, A.M. and Jetha, N.M. "Central Government Grants to Local Authorities: A Case Study of Kenya." *African Studies Review*, April, 1970, 43-56.

This paper gives a brief history of government grants to local authorities in Kenya, presents the new grant system started in 1968 and evaluates this system. The new system is based on a formula of the difference between the expenditure target set by the government and the projected revenue of County Councils. The authors assert that this system will help Kenya and other countries solve some of their educational finance problems.

Sheehan, Barry A. "The Organization and Financing of Education in Australia." *Comparative Education*, December, 1972, 133-147.

As the title states, this article describes the organization and financing of education in Australia. It describes lines of authority and responsibility for management and finance. It deals with the current movement to decentralize. It describes aims of education and also various types of schools such as non-governmental, vocational, and special ones.

Shiver, Elizabeth N. (ed.). *Higher Education and Public International Service*. Washington, D.C.: American Council on Education, 1967.

This group of papers covers a variety of topics concerning the relationship of universities and government in the field of foreign aid. The essay by Frederick Harbison dealing with the use of human resources and the one by Paul Miller on coordinated planning are most appropriate to the topic of this bibliography.

That, I.N. and Adams, Don. *Educational Patterns in Contemporary Societies*. New York: McGraw-Hill Book Company, 1964.

The authors describe the development of the education systems of the major Western and Eastern powers. The authors focus on these because they have had great impact on educational systems of developing countries. They then discuss newly emerging patterns in South America, Africa, and Asia. Aspects of educational finance are included in the descriptions of the educational arrangements.

UNESCO. *Readings in the Economics of Education*. Paris: UNESCO, 1968. (French and English in one volume.)

This volume consists of a selection of writings by economists on the

role of education in economic development. Two sections deal specifically with aspects of financing: investment and resources.

UNESCO. *The Development of Higher Education in Africa.* Two volumes. Paris: UNESCO, 1963.

These volumes are proceedings from a conference held by UNESCO in 1962. It covers all aspects of the development of higher education, discusses needs, and development plans. In addition, one chapter concentrates on finance and another discusses foreign assistance financing.

Upraity, Trailakya Nath. *Financing Elementary Education in Nepal.* Unpublished Ph.D. Dissertation, University of Oregon, 1962.

This thesis provides a thorough understanding of all aspects of primary education in Nepal with particular emphasis on financing. Within this framework, the author examines the financial implications of various plans to implement universal compulsory free primary education in Nepal.

Vaizey, John *et al. The Political Economy of Education.* London: Gerald Duckworth, 1972.

This is one of the few books that discusses the economics of education from a comparative perspective. Although the data will be dated, the importance of the book is in the analytical discussion of the relationship between economic and educational planning.

Vaizey, John. *The Control of Education.* London: Faber and Faber, 1963.

The author focuses on varied aspects of education policy and their relationship to economics. Some topics covered are education's relationship to a national economy, mechanisms to control expenditures, teacher status, and morals and politics. The lessons of this book, although taken from a British experience, are applicable to all.

West, E.G. *Economics, Education and the Politician.* Hobart Paper No. 42. London: Institute of Economic Affairs, 1968.

West, in a most lucid and well organized paper, discusses the "welfare politics" of education. He asserts that the serious deficiencies in services and the resulting frustration can be directly traced to the workings of the whole political process. He applies the "economics of politics" to education. He focuses attention on such subjects as the economics of political behavior (profit maximizing); political and academic resistance to fees, grants and vouchers; the neutrality of vouchers; the financial starvation of education; compulsory education and the raising of the school-leaving age; and a positive voucher proposal.

West, E.G. *Education and the State—A Study of Political Economy.* London: The Institute of Economic Affairs, 1965.

The author provides an impartial inquiry into the reasoning and the facts of the case for state education today. West puts forward the arguments by political and economic theorists for and against state education. Although the investigation is based on England and Wales, the theories appear applicable to many other Western countries.

West, E.G. "Private vs. Public Education—A Classic Economic Dispute." *Journal of Political Economy*, October, 1964, 465-475.

This lucid and well written article examines the division of opinion among the classical economists concerning the applicability of the free-market principle to education. West discusses the preferences and arguments of Adam Smith and then discusses the roles of John S. Mill, Nassau Senior, and Edwin Chadwick in developing British government policy in education. Finally Robert Lowe's ideas as representative of Smith are contrasted with his contemporaries, Mills, Senior, and Chadwick.

Williams, Peter. *Aid to Education: An Anglo-American Appraisal*. London: Ditchley Foundation, 1965.

This pamphlet summarizes the findings of an Anglo-American Conference on the Principles and Policies of Educational Aid. The pamphlet covers four topics: donor's programs and policies of educational aid, the requirements of recipient countries, conclusions about principles and policies to be pursued, and specific suggestions for Anglo-American cooperation.

Woodhall, Maureen. *Student Loans: A Review of Experience in Scandinavia and Elsewhere*. London: George G. Harrap and Company, Ltd., 1970.

The purpose of this book is to analyze working student loan schemes in Scandinavia. It is not arguing for or against a student loan scheme for Britain. It develops from a discussion of the rationale for student loans into a description of the Scandinavian educational system, the types of financial aid for students there, attitudes toward loans, and the economic and social aspects of study loans. It closes with the effects of student loans on educational efficiency, adds a brief description of student loan schemes in other countries, and presents conclusions.

Zymelman, Manuel. *Financing and Efficiency in Education—Reference for Administration and Policymaking*. Boston: Nimrod Press, 1973.

This book, as the title indicates, is a reference for administrators and policymakers to provide them with a thorough understanding of the problems and possibilities of different financing methods for education. It is divided into two parts. The first provides an historical overview of financing methods and then discusses the state of the art of financing the various levels and types of education. In addition, it suggests formulas for the equitable distribution of resources as well

as an index to measure educational funding. The second part focuses on efficiency. Problems of administration and the utility of PPBS, educational contracting, formulas to increase efficiency and an index for measuring educational expenditures are all discussed.

EDUCATIONAL FINANCE—DEVELOPING COUNTRY STUDIES

Afghanistan

Afghanistan, Ministry of Education. *Financing and Cost of Education*. Kabul: Ministry of Education, 1967.

Algeria

Algeria, Ministere de l'education nationale. Direction de la planification et de l'orientation scolaires. "Depenses de l'education. Analyse du budget et cout des services. Les finances de l'education." *Bulletin interieur et de liaison de services de la planification de l'education*, Janvier-Fevrier, 1968, 24-42.

Vaugrante, Cristiane. *Preliminaries a une planification de l'education integree dans un plan de developpement economique et social. Financement et rendement du systeme scolaire algerien en 1964*. Alger: Ministere d l'education nationale, 1965.

Arab States

El-Ghannam, Mohamed A. *Financing Education in the Arab States: A Survey of Recent Trends and Future Prospects*. Paris: UNESCO, Occasional Paper #20, 1970.

Argentina

Brodersohn, Mario. *Financing Education in Argentina*. Unpublished paper, AID-Harvard Project on Financing Education, 1972.

Sector de educacion del consejo nacional de desarrollo. *Financiamiento de la educacion en Argentina*. (Financing of Education in Argentina) Paris: UNESCO, n/d.

Cambodia

Reiff, H. W. *Financing, Expenditure and Cost of Education in Cambodia*. Bangkok: UNESCO Regional Office for Education in Asia, 1968.

Ceylon

Ceylon, Ministry of Education. "The Economic Aspects of Education." *Education in Ceylon, a Centenary Volume*, Vol. III. Colombo, 1969, 1047-1106.

Chile

Schiefelbein, Ernesto. *Financing Education in Chile*. Unpublished paper, AID-Harvard Project on Financing Education, 1972.

Schiefelbein, Ernesto. *Financiamiento de la educacion en Chile*. Santiago, Chile: UNESCO Regional Office of Education, n/d.

Congo

Mawanda, Emmanuel M. *Problemes financiers de l'enseignment au Congo, 1950-1964*. Kinshasa: Universite de Lovanium, Faculte des sciences politiques, sociales et economiques, 1965.

Ethiopia

ter Weele, Alex. *Financing Education in Ethiopia*. Unpublished paper, AID-Harvard Project on Financing Education, 1972.

India

Education Commission. *Financing of Education: Some Problems for the Consideration of the Task Force on Educational Finance*. New Delhi, 1965.

Misra, Atmanand. *The Financing of Indian Education*. Bombay: Asia Publishing House, 1967.

Indonesia

Suriasumantri, Jujun S. *Educational Finance in Indonesia*. Unpublished paper, AID-Harvard Project on Financing Education, 1972.

Kenya

Kinyanjui, Peter. *Resources Flow in Education: The Case of Financing Education in Kenya 1968-1971*. Unpublished paper, AID-Harvard Project on Financing Education, 1972.

Korea

Peterson, Leroy. *Interim Report on Educational Finance in Korea*. Unpublished paper, Midwest Universities Consortium for International Activities (MUCIA). Supported by AID, 1969.

Madagascar

Madagascar, Ministere des affaires culturelles. *Evolution des depenses publiques d'education a Madagascar de 1961 a 1967*. Tananarive, 1967.

Nigeria

Nigeria, Committee on Education and Human Resource Development. Nigeria Project Task Force. *The Cost and Financing of Education in Nigeria*. A discusson paper presented by the Staff of the Committee, New York: Education and World Affairs, 1967.

Tanzania

ter Weele, Alex. *Financing Education in Tanzania*. Unpublished paper, AID-Harvard Project on Financing Education, 1972.

Thailand

Kraprayoon, Pacharee. *Financing Education in Thailand.* Unpublished paper, AID-Harvard Project on Financing Education, 1972.

Uganda

Kibuka, Robin. *Financing Education in Uganda.* Unpublished paper, AID-Harvard Project on Financing Education, 1972.

Multi-National Studies

International Institute of Public Finance. *Finances publiques et education (Public Finance and Education).* Congres de Paris, Septembre, 1965, XXI[e] session. New York, 1966.

Internationales Seminar uber Bildungsplanung. Berlin. 19. bis 28. Oktober, 1966. *Referate und Diskussionen (Papers and discussions).* Berlin: Institut fur Bildungsforschung in der Max-Planck-Gesellschaft, 1967.

UNESCO. Regional Office for Education in Asia. *Investment in Education—Regional Technical Assistance Seminar on Investment in Education in the Countries Participating in the Karachi Plan,* Bangkok, 7-15 April 1964, Report of the Seminar and papers by experts. Bangkok, 1967.

UNESCO. Regional Seminar on Investment in Education in Latin America organized jointly by UNESCO and the Economic Commission for Latin America, Santiago de Chile, 5-13 December, 1966. *Final Report.* Paris: UNESCO, 1967. (Also published in Spanish and in French.)

UNESCO. Organization of African Unity. Conference on education and scientific and technical training in relation to development in Africa, Nairobi, 16-27 July, 1968. *Trends in the Financing of Education in Certain African Countries.* Paris: UNESCO, 1968.

BIBLIOGRAPHIES

DEALING WITH EDUCATIONAL FINANCE

Cook, Howard R.L. "The Question of School Finance Recent Selected References." Washington, D.C.: Congressional Research Service, Education and Public Welfare Division, January, 1972.

Blaug, Mark. *Economics of Education: A Selected Annotated Bibliography.* 2nd Edition. New York: Pergamon Press, 1970.

Hufner, Klaus. "Economics of Higher Education and Educational Planning: A Bibliography" *Socio-Economic Planning Sciences,* Vol. 2, No. 1, 1968, 25-101.

UNESCO, International Bureau of Education. *Educational Documentation and Information—Bulletin—Financing of Education.* Paris: UNESCO, International Bureau of Education, first quarter, 1971.

Deitch, Kenneth M. and McLoone, Eugene P. *The Economics of American Education: A Bibliography, Including Selected Major References for Other Nations*, Bloomington, Indiana: Phi Delta Kappan, 1966.

Goldhammer, Keith, *et al. Issues and Problems in Contemporary Educational Administration, A Review of Related Literature Supplementary Report.* Eugene, Oregon: Oregon University, 1967.

Canadian Teachers' Federation. "Bibliography on Educational Finance." Ottawa, Canada: Ottawa Research Division, 1965.

Educational Reference Center, National Center for Educational Communication. *Educational Finance—An ERIC Bibliography.* Prepared for the President's Commission on School Finance. New York: CCM Information Corporation, 1972.